

**A Plumage Variation in the Singing Honeyeater.**—The normal plumage colour of the crown of the Singing Honeyeater (*Meliphaga virescens*) is olive-grey locally, becoming paler and browner in the north, and the only variation in specimens in the W.A. Museum is a dull rufous on the mid-line of the forehead from the bill halfway back to the level of the eye. The rufous contrasts so little with the remainder of the crown and is so limited in extent that it is unlikely to be noticed in the field (Dr. G. Storr, pers. comm.).

On 23 March, 1969, I trapped an individual at my residence in Wilson which had the plumage of the crown, from the beak to just behind the eye, a rich golden brown. At the time of handling I did not notice any other plumage difference but coloured photographs of the bird show traces of a white eyebrow too. I have previously noted white eyebrows in a juvenile which I trapped at Nedlands on 27 December, 1963.

The golden-crowned bird had the iris, beak, gape and tarsus all of normal adult colouration. Its body length (19.7 cm.), tail length (8.5 cm.), wing length (8.9 cm.) and culmen length (1.6 cm.) are all within the ranges I have recorded from other live adults.

The bird had slight moult of the nape and throat, the inner seven primaries had recently been renewed, the 8th was just out of its sheath and the 9th was still in sheath. The outer three pairs of tail feathers had been dropped and were being renewed, the outer pair being the shortest. The bird was not examined further.

It would appear that this variation is the result of chance mutation in the gene(s) controlling crown and eyebrow colouration and that there may be some linkage between the two variations.

The golden-crowned bird has been seen a few times since its release and though I was unable to discern the crown colour when the bird was in shady positions, it was very obvious when the bird was in direct sunlight.

Mr. T. Spence saw an individual with a yellowish coloured face at a swamp adjacent to Hardy Road, Cloverdale in March, 1968. It was noticeably different to the individual I trapped (pers. comm. after examination of my photographs).

—R. H. STRANGER, Wilson.

**Egg-laying and Hatching in the Weevil, *Catasarcus asphaltinus* Thompson 1968.**—A recent taxonomic review of the Australian genus *Catasarcus* Schonherr by Mr. R. T. Thompson (*Bull. British Museum (Natural History)*, 22, (8), 1968: 375-454) has highlighted the fact that very little has been recorded on the biology of the adults of any of its 41 species and that the immature stages are unknown except for brief information on the egg and a late instar larva of one of the species, *C. asphaltinus*. This species, according to Thompson, is confined to a coastal strip, in the south-west of Western Australia, of less than 40 miles width and extending from Moore River in the north to Bunbury in the south.

The information on the immature stages had been received by Thompson from Mrs. P. Sundstrom of Tuart Hill, Perth. This information is simply that the eggs are 1/16 in. x 1/20 in., white, smooth, cylinder shaped, rounded at each end, and laid in small globular clusters of 12 to 14 adhering together with clear sticky fluid, 1/4 in. below soil surface, and that she found a *C. asphaltinus* larva, 1/2 in. long, pale grey/pink attached by its jaws at 8 in. depth to the tap root of a eucalypt sapling.

The following descriptions and illustrations based on eggs and first instar larvae obtained from a female *C. asphaltinus* collected on 13th April, 1969 at Inglewood, Western Australia, supplement Thompson's brief information.

The egg and first instar larva are 1.7 mm. long and 0.8 mm. wide. The egg is white when laid, but turns light creamy yellow in about a day,

and has a smooth practically transparent chorion; the first instar larva has a white to creamy yellow body with a light brown head capsule and a bilobed termination to the mandible which has a light brown to brown margin (Fig. 1).

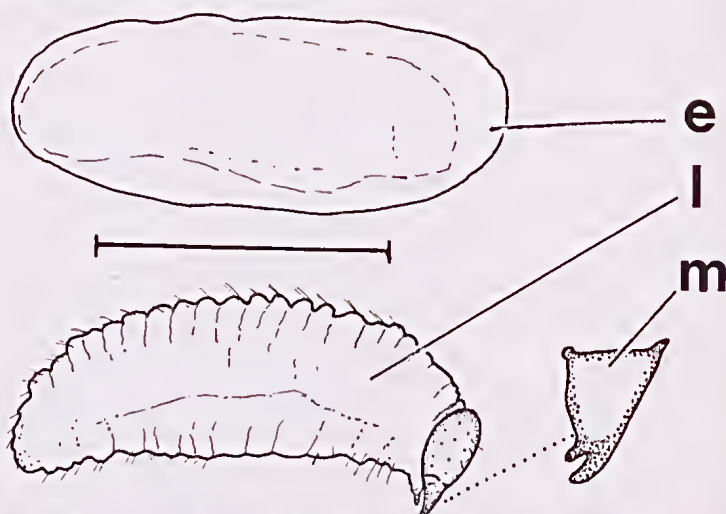


Fig. 1.—Egg (e), first instar larva (l), and mandible (m) of the weevil, *Catasarcus asphaltinus* Thompson (scale line for e and l=1 mm.).

All the larvae died during the first instar stage. The female and representative eggs and larvae are lodged in the Western Australian Museum. Reg. Nos. W.A.M. 69-1064, 69-1070 to 69-1071, 69-1065 to 69-1069 respectively.

The following data on egg-laying and hatching have been obtained.

At night on its date of capture, 13th April, the female laid 6 eggs and continued to lay a total of about 108 eggs. The daily number of eggs laid, shown in apposition to the date, are as follows: 13th April (6), 14th (13), 15th (0), 16th (8), 17th (1), 18th (0), 19th to 21st (24), 22nd (0), 23rd (about 50), 24th (3), 25th (0), 26th (0), 27th (0), 28th (3). No more eggs were laid after the 28th April, and the female died on the 4th June, 37 days after the last eggs were laid. It is unknown whether it had commenced laying before its date of capture; therefore the figure of about 108 eggs is almost certainly an underestimate. The eggs were laid in clusters of up to 25, but about 40% were laid singly.

The dark head-capsules on the developing larvae were evident within the egg on the sixth day after laying.

The number of eggs hatching and the duration of their development, in apposition, given with the date on which they were laid, are as follows: 14th April, 4 eggs (duration of egg-development, 14 days), 1 egg (16 days), 2 eggs (18 days); 16th April, 6 eggs (16 days), 1 egg (20 days); 19th to 21st April, 6 eggs (15-17 days), 1 egg (16-18 days), 2 eggs (22-24 days); 23rd April, 1 egg (14 days), 14 eggs (15 days), 14 eggs (16 days). Thus the eggs hatched between the 28th April and 13th May, had a duration of development of 14 to 24 days, the mean ( $\pm$ S.D.) of the duration of egg development being  $16.92 \pm 1.82$  days, and out of the total of about 108 eggs, 56 failed to hatch. Sixteen of these were killed by fungi.

The temperature range in the laboratory during the period of study was 17.2 to 20.0° C.

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